

I CLAIM:

1. In combination with a loudspeaker assembly that includes a speaker diaphragm that is displaced to produce sound, the combination comprising

- a) a spinner element mounted to rotate in the path of sound waves produced by the speaker diaphragm; and
- b) a rotary drive for rotating the spinner,
- c) the spinner defining sound wave passing through openings, in said path.

2. The combination of claim 1 wherein the spinner substantially spans said path.

3. The combination of claim 1 wherein the specimen comprises:

- i) a hub, and
- ii) spaced apart arms extending outwardly from said hub.

4. The combination of claim 3 wherein said arms have spaced apart extents between which said openings are formed.

5. The combination of claim 1 wherein said drive comprises an electric motor positioned between said diaphragm and said spinner.

6. The combination of claim 3 wherein said drive comprises an electric motor positioned between said diaphragm and said hub, and operatively connected to the hub.

7. The combination of claim 1 including a front plate defined by said assembly, the plate defining an aperture in alignment with said openings, the plate carrying the diaphragm.

8. The combination of claim 7 including an interior support carried by the plate and carrying the drive.

9. The combination of claim 3 wherein the arms have varying widths along arm lengths which extend generally radially.

10. The combination of claim 9 including braces in the path of said sound waves and connected to the arms at location along their lengths.

11. The combination of claim 1 wherein the drive rotates the spinner at a speed causing audible modulation of said sound waves passing through said openings between the arms.

12. The combination of claim 9 wherein the drive rotates the spinner at a speed causing said varying width arms to discernibly and audibly modulate sound waves passing through the openings between the arms.

13. The combination of claim 1 including said diaphragm that is generally concave toward the spinner.

14. The combination of claim 13 wherein the drive is generally centrally located at an axis defined by the spinner, and supports the spinner for rotation, the drive located between the spinner and diaphragm.

15. The combination of claim 8 including a mounting ring carrying said support and carried by said plate.